

Application No. 09/813,314

IN THE CLAIMS:

Please cancel claims 1-15 without prejudice to or disclaimer of the subject matter recited therein.

Please add new claims 16-30 as follows:

--16. (New) A passive repeating plyometric muscle strengthening method which comprises the following steps:

positioning a trainee on a pedal;

adjustably moving the pedal up and down repeatedly under a load for exercising; and

burdening the trainee with a continuous load to perform plyometric and eccentric contraction muscle training in a short time with a large amount of acting units.

17. (New) A passive repeating plyometric muscle strengthening method according to claim 16, wherein the step of moving the pedal up and down is set at a speed between 1 and 1000 times per minute.

18. (New) A passive repeating plyometric muscle strengthening method according to claim 16, wherein the moving step is carried out by slipping the pedal over a plurality of upright posts on a surface of a plate seat, and moving the pedal up and down by an electric motor and the burdening step includes a load bearing rack provided on the upright posts.

19. (New) A passive repeating plyometric muscle strengthening method according to claim 18, wherein the step of moving is carried out by setting a rotating rate of the motor between 1 rpm and 1000 rpm.

20. (New) A passive repeating plyometric muscle strengthening method according to claim 18, wherein the step of moving is carried out by controlling the rotating rate of the motor by a variable resistance adjuster.

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21. (New) A passive repeating plyometric muscle strengthening method according to claim 18, wherein the step of moving utilizes the electric motor to drive a rotating wheel, the follower rod has a first end linked with the pedal and a second end linked eccentrically to the rotating wheel.

22. (New) A passive repeating plyometric muscle strengthening method according to claim 21, wherein the step of moving includes adjusting an amplitude of the up and down motion of the pedal.

23. (New) A passive repeating plyometric muscle strengthening apparatus comprising:

a plate seat;

a plurality of upright posts extending upwardly from the plate seat, a load bearing rack being provided on the upright posts;

a single pedal slidably mounted on the upright posts so as to be movable relative to the plate seat in a vertical direction; and,

a power mechanism for driving the pedal in an up and down vertical motion at a predetermined speed, the power mechanism including a device for controlling an amplitude and rate of up and down motion of the pedal.

24. (New) The passive repeating plyometric muscle strengthening apparatus according to claim 23, wherein the power mechanism includes an electric motor provided below the pedal driving a rotating wheel; and a follower rod having a first end linked with the pedal and a second end linked eccentrically to the rotating wheel.

25. (New) The passive repeating plyometric muscle strengthening apparatus according to claim 24, wherein a rotating rate of the electric motor is controlled by a variable resistance adjuster.

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26. (New) The passive repeating plyometric muscle strengthening apparatus according to claim 24, wherein the amplitude of up and down motion of the pedal is determined by a length of the follower rod and a position that the follower rod is connected eccentrically to the rotating wheel.

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27. (New) The passive repeating plyometric muscle strengthening apparatus according to claim 23, wherein the load bearing rack comprises a pair of "H" shaped rack members each having a plurality of adjustment holes for receiving holding rods therein.

28. (New) The passive repeating plyometric muscle strengthening apparatus according to claim 23, wherein the plate seat has a bottom surface with a plurality of rollers thereon.

29. (New) The passive repeating plyometric muscle strengthening apparatus according to claim 24, wherein the electric motor rotates at a speed of between 1.5 rpm and 1,000 rpm.

30. (New) The passive repeating plyometric muscle strengthening apparatus according to claim 23, wherein the rate of repeated up and down motion of the pedal is between 1 and 1,000 times per minute.--
